

ABSTRACT

The present invention relates to a method for producing a silicon single crystal pulled while doping with carbon and nitrogen and controlling to have an N-region over an entire plane of the crystal, and a silicon wafer doped with carbon and nitrogen and having an N-region over an entire plane. From this develops a growth technique of a silicon single crystal possible to grow a single crystal having few grown-in defects and high IG ability at a high growing rate, and there are provided a silicon wafer having an N-region over an entire plane of the crystal and high IG ability, an epitaxial wafer and an annealed wafer having excellent crystallinity and IG ability.

10009910-121301